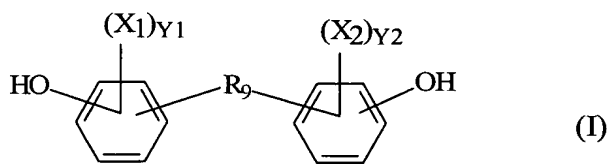


-34-

CLAIMS

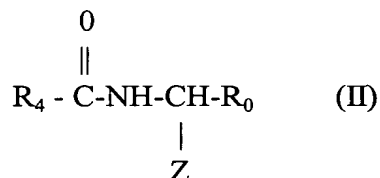
What is claimed is:

1. An implantable, radio-opaque medical device comprising a radio-opaque, iodine- or bromine-containing polymer having at least one repeating unit derived from a monomer described by the formula (I):



wherein X_1 and X_2 are independently iodine or bromine, Y_1 and Y_2 are independently 0, 1 or 2, and R_9 is an alkyl, aryl or alkylaryl group containing up to 18 carbon atoms optionally substituted with iodine or bromine.

2. The implantable, radio-opaque medical device of claim 1, wherein R_9 has the structure (II):



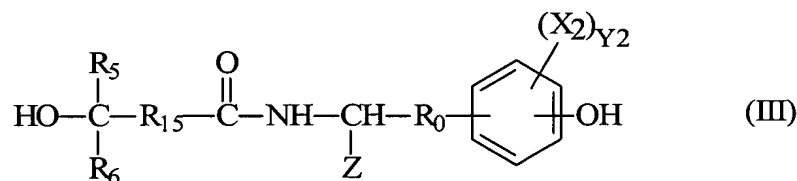
wherein R_0 is selected from the group consisting of $-CH=CH-$, $-CHJ_1-CHJ_2-$ and $(-CH_2-)_m$; R_4 is selected from the group consisting of $-CH=CH-$, $-CHJ_1-CHJ_2-$ and $(-CH_2-)_n$, in which m and n are independently 0 to 8, inclusive, and J_1 and J_2 are independently Br or I; and Z is selected from the group consisting of hydrogen, a free carboxylic acid group and esters and amides thereof, said ester and amide being selected from the group consisting of straight and branched alkyl and alkylaryl groups containing up to 18 carbon atoms and derivatives of biologically and pharmaceutically active compounds.

-35-

3. The implantable, radio-opaque medical device of claim 2, wherein R_4 is $-\text{CH}_2-$ or $-\text{CHJ}_1-\text{CHJ}_2-$ and R_o is $-\text{CH}_2-$ or $-\text{CH}_2-\text{CH}_2-$.
4. The implantable, radio-opaque medical device of claim 2, wherein Z is a free carboxylic acid group, or an ethyl, butyl, hexyl, octyl or benzyl ester or amide thereof.
5. The implantable, radio-opaque medical device of claim 1, wherein Y_1+Y_2 is greater than zero.
6. The implantable, radio-opaque medical device of claim 1 wherein said medical device is formed from said polymer.
7. The implantable, radio-opaque medical device of claim 1 wherein said medical device is coated with said polymer.
8. The implantable, radio-opaque medical device of 1 wherein said device comprises a radio-opaque, biocompatible stent comprising said polymer.
9. The implantable, radio-opaque medical device of claim 12 wherein said device is a radio-opaque, biocompatible stent.
10. The implantable, radio-opaque medical device of claim 1, wherein said polymer further comprises one or more poly(alkylene oxide) blocks.

-36-

11. An implantable, radio-opaque medical device comprising a radio-opaque polymer having at least one repeating unit derived from a monomer described by the formula (III):



wherein R_5 and R_6 are each independently selected from the group consisting of H, Br, I and straight and branched alkyl groups having up to 18 carbon atoms, R_0 is selected from the group consisting of $-\text{CH}=\text{CH}-$, $-\text{CHJ}_1-\text{CHJ}_2-$ and $(-\text{CH}_2-)_m$ and R_{15} is selected from the group consisting of $-\text{CH}=\text{CH}-$, $(-\text{CH}_2-)_c$ and $-\text{CHJ}_1-\text{CHJ}_2-$, wherein J_1 , J_2 and each X_2 are independently Br or I; c and m are independently between 0 and 8, inclusive; Y_2 is 0, 1 or 2; and Z is selected from the group consisting of hydrogen, a free carboxylic acid group or an ester or amide thereof, said ester or amide comprising straight and branched alkyl and alkylaryl groups containing up to 18 carbon atoms and derivatives of biologically and pharmaceutically active compounds.

12. The implantable, radio-opaque medical device of claim 11, wherein R_{15} is $-\text{CH}_2-$ or $-\text{CHJ}_1-\text{CHJ}_2-$ and R_0 is $-\text{CH}_2-$ or $-\text{CH}_2-\text{CH}_2-$.

13. The implantable, radio-opaque medical device of claim 11, wherein Z is a free carboxylic acid group or an ethyl, butyl, hexyl, octyl or benzyl ester or amide thereof.

14. The implantable, radio-opaque medical device of claim 11, wherein R_{15} is $(-\text{CH}_2-)_c$, c is 0 and R_1 and R_2 are independently hydrogen or a methyl group.

15. The implantable, radio-opaque medical device of claim 14, wherein R_1 and R_2 are both hydrogen.

-37-

16. The implantable, radio-opaque medical device of claim 14, wherein one of R_1 and R_2 is hydrogen and the other is a methyl group.

17. The implantable, radio-opaque medical device of claim 11, wherein R_0 is $-\text{CH}_2-$ and Z is a carboxylic acid ethyl ester.

18. The implantable, radio-opaque medical device of claim 11, wherein Y_2 is 1 or 2.

19. The implantable, radio-opaque medical device of claim 11, wherein said polymer further comprises one or more poly(alkylene oxide) blocks.

20. The implantable, radio-opaque medical device of claim 11 wherein said medical device is formed from said polymer.

21. The implantable, radio-opaque medical device of claim 11 wherein said medical device is coated with said polymer.

22. The implantable, radio-opaque medical device of 11 wherein said device comprises a radio-opaque, biocompatible stent comprising said polymer.

23. The implantable, radio-opaque medical device of claim 20 wherein said device is a radio-opaque, biocompatible stent.